

Abstract

A data storage device is described that includes a plurality of host interface units, a plurality of disk interface units, and a plurality of disk drive units each coupled to one of the disk interface units. The host interface units may be coupled to one or more external host systems for performing a data operation to a disk drive system. A disk drive unit includes a controller with an onboard memory subdivided into two sections in which one of the sections may be used in connection with performing caching operations of data. The data cached may be from the disk platter associated with the disk drive unit, or, the data cached in the section may also be from another disk drive unit different from the one associated with the disk drive unit in which the section is included. Commands are generated for performing data caching operations to the section of the onboard memory. Also described is a method of interpreting commands provided to the disk drive unit in connection with performing data caching and other data operations to the associated disk drive.